

**Environmental Protection Agency**  
**Fiscal Year 2010 Program Review**  
**Of the**  
**Texas Commission on Environmental Quality**  
**Public Water Supply Supervision Program**

March 23, 2011

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## I. Introduction

The Public Water Supply Supervision (PWSS) Program Review meeting was conducted at the Texas Commission on Environmental Quality's (TCEQ) Austin, Texas office on September 21, 2010. The following table contains the meeting attendees.

**TCEQ PWSS Program Review Attendee Table:**

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This report reviews TCEQ's PWSS Program under the Safe Drinking Water Act (SDWA). Title 40 of the Code of Federal Regulations (CFR) part 142.17 (a)(1) states: "At least annually the Administrator shall review, with respect to each State determined to have primary enforcement responsibility, the compliance of the State with the requirements set forth in 40 CFR part 142, subpart B, and the approved State primacy program." This review examines TCEQ's drinking water rules implementation and reporting and documents TCEQ's initiatives, activities, and achievements undertaken to meet and/or exceed the national drinking water standards.

TCEQ's Public Drinking Water Section (PDWS) is tasked to regulate new and more-protective drinking water rules and undertake data management and reporting challenges. EPA will continue to work in partnership with TCEQ to strengthen the PWSS program, tackle adopting new primacy requirements, enhance program efficiency and compliance determination, and ultimately assure consumers access to cost effective and superior quality drinking water. EPA recognizes that TCEQ has dedicated staff willing to work to uphold a high quality PWSS program as evidenced in this review.

## **II. Highlights and Recommendations**

1. TCEQ and EPA are pursuing primacy revision approval incorporating six drinking water rules:
  - Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
  - Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)
  - Ground Water Rule (GWR)
  - Public Notification Rule minor revisions (PN/MR)
  - Variance and Exemptions Regulations (V&E)
  - Lead and Copper Rule Short Term Revisions (LCR/STR)
2. TCEQ plans to submit three primacy revision applications:
  - DBP2, LT2, V&E, and PN/MR (Four Rule Package)
  - GWR
  - LCR/STR
3. TCEQ did not achieve the FY 2010 Source Water Protection Performance Measures SP 4(a) & (b) shown in Appendix G. TCEQ should therefore raise implementation efforts to increase the number of Texas community water systems and corresponding population served where risk to public health is minimized through source water protection and/or correct any requisite data reporting issues.
4. The EPA FY 2010 Texas SDW-1a measure was reported as 59%. The Texas SDW-1a currently queried by EPA is 89%. The Texas SDW-1a was underreported due to a SDWIS-Texas reporting issue. This specific data base problem has been remedied as confirmed by EPA in the current SDWIS-Fed database via SDW -1a 3/22/2011 query.
5. The TCEQ FY 2010 Sanitary Survey Performance Measure (SDW-1a) is 89% as currently filed in SDWIS-Fed. This is less than the EPA Target as indicated in Appendix G. The SDW-1a State target is 93%. TCEQ should therefore increase efforts to ensure sanitary surveys at Subpart H systems are completed every three years.
6. EPA commends TCEQ for Texas water system compliance above the Performance Activity Measures (PAM) expectations illustrated in Appendix F.
7. TCEQ needs to continue to improve SDWA federal reporting timeliness, completeness, and the accuracy of public drinking water compliance determinations and inventory data. EPA recommends that TCEQ continue to direct resources toward, and prioritize as appropriate, the installation, testing, and production of Safe Drinking Water Information System (SDWIS) and its compliance modules.
8. The FY 2010 Enforcement Program Review is available in a separate report.

9. TCEQ is encouraged to draw down DWSRF Set-aside funds for expenses in a timely manner.
10. The Texas top 50 systems health based violations by population are summarized in the below table.

**FY 2010 Texas Top 50 Violations Table**

Reference Appendix H

SDWA Rule (Type)	Contaminant	Violations	Systems	Population Affected	Percent Top 50 Population
		Sum “Top 50 Systems by Population”			
Rads	Gross Alpha	4	2	11,500	0.78%
	Comb Radium	2	1	5,324	0.36%
LT1 (TT)	None	15	8	414,477	28.0%
IOC (MCL)	Arsenic	19	6	39,819	2.69%
	Fluoride	8	2	114,417	7.72%
	Nitrate	3	1	12,500	0.84%
DBP1 (MCL)	TTHM	17	7	68,182	4.60%
	HAA5	6	3	25,328	1.71%
TCR (MCL)	Coliform	28	26	784,820	53.0%
SOC (MCL)	Di(2-ethylhexyl) phthalate	2	1	5,433	0.37%
SUM		104	57	1,481,800	100%

11. Texas PWS violations are illustrated in the below table.

**FY 2007 to FY 2010 PWS MCL Violations Table**

Summarizing FY SDWIS/Fed data

Contaminant	FY 2007	FY 2008	FY 2009	FY 2010
Arsenic	249	229	262	355
Fluoride	94	72	93	118
Nitrate	98	114	145	131
IOC Total	441	415	500	604
Combined Radium	12	31	26	51
Gross Alpha	1	10	21	47
Uranium	2	21	8	15
Rad Total	15	62	55	113
TCR (MCL)	68	77	79	100
LCR (ALE)	62	60	39	27
TTHM	321	271	110	211
HAA5	66	78	34	57
DBP1 Total	387	349	144	268

12. EPA appreciates the continued forthcoming and receptive relationship it has with TCEQ. EPA also recognizes the continued PWSS partnership with TCEQ in such areas as EPA program reviews, disaster response, conferences, pilot project(s), and other initiatives.

### III. Texas Drinking Water System Universe

Public water systems (PWS) provide water for human consumption through pipes or other constructed conveyances to at least 15 service connections or serve an average of at least 25 people for at least 60 days a year. EPA has defined three types of public water systems:

1. Community Water System (CWS): a public water system that regularly supplies water to at least 25 year-round residents or to at least 15 service connections.
2. Non-Transient Non-Community Water System (NTNCWS): a public water system that is not a community water system and that regularly supplies water to at least 25 of the same people at least six months per year. Some examples are schools, factories, office buildings, and hospitals which have their own water systems.
3. Transient Non-Community Water System (TNCWS): a non-community water system that does not regularly serve at least 25 of the same persons over six months of the year such as a gas station or campground.

PWS sources are:

- Ground water (GW)
- Purchased ground water (GWP)
- Surface water (SW)
- Purchased surface water (SWP)
- Ground water under the influence of surface water (GU) or (GWUDI) and
- Purchased ground water under the influence of surface water (GUP)

EPA water system size classifications used in this report are:

- Small systems serve 25 to 3,300 people
- Medium systems serve 3,301 to 10,000 people
- Large systems serve more than 10,000 people

According to the Federal Safe Drinking Water Information System (SDWIS/Fed) the State of Texas has a total of **6,815 PWSs** serving **25,845,430 people** as illustrated in the following Texas PWSs Population Table.

### Texas FY 2010 PWS Population Table

Data acquired via October 1, 2009 through September 30, 2010, as of November 16, 2010, SDWIS/Fed Data Pull

PWS Type	GU		GUP		GW		GWP		SW		SWP		TOTAL	
	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP	SYS	POP
<b>CWS</b>	10	9,534	0	0	3,323	6,901,390	202	396,235	288	11,268,766	858	6,510,455	4,681	25,086,380
<b>NTNC</b>	0	0	0	0	757	223,234	16	5,339	6	3,820	89	266,544	868	498,937
<b>TNC</b>	4	700	0	0	1,170	220,006	28	9,184	12	9,674	52	20,549	1,266	260,113
<b>Sum</b>	14	10,234	0	0	5,250	7,344,630	246	410,758	306	11,282,260	999	6,797,548	<b>6,815</b>	<b>25,845,430</b>

## **IV. TCEQ PWSS Program Organizational Update (FY 2010)**

Appendix A shows the OW/WSD Organization Chart and Appendix B contains the WSD Contact Table. Appendix C shows the overall TCEQ Organization Chart. The TCEQ PWSS program involves three offices and multiple divisions. The office of Water (OW) houses the Water Supply Division (WSD). The Office of Compliance and Enforcement (OCE) contains the Enforcement Division (ED), the Field Operations Division (FOD), and the Field Operations Support Division (FOSD). The Office of Permitting and Registration (OPR) houses the Permitting & Registration Support Division (PRSD) where the operator certification program is currently located. PWSS Program required elements and tasks are managed within TCEQ organizational units.

**Background:** Prior to, and immediately after, federal promulgation of the SDWA, PWSS Program responsibility resided with the Texas Department Health. In 1990, the program was transferred to the Texas Water Commission, which was reorganized into the Texas Natural Resource Conservation Commission (TNRCC) in 1992. In 2003, the TNRCC was renamed the TCEQ.

### **IV. A. PWSS Program Responsibility Areas**

Program Responsibility information in this section is summarized from the TCEQ Quality Assurance Project Plan (QAPP) for the PWSS Program approved on November 9, 2010.

#### **Public Drinking Water Section (OW/WSD/PDWS)**

The Public Drinking Water Section (PDWS) has responsibility for data deliverables, report deliverables, and many of the PWSS Program elements in order to:

- Manage disbursement of the PWSS Program Performance Partnership Grant
- Provide inventory, grant-withholding, and action data deliverables to EPA R6
- Provide the QAPP, Annual Compliance Report and other report deliverables to EPA R6
- Write, adopt and implement rules at least as stringent as the federal rules (Texas Administrative Code (TAC) Chapter 290)
- Provide compliance and technical assistance to PWSs
- Ensure initial water quality meets minimum standards before approving a new source
- Assess the source water susceptibility of all drinking water sources in the state
- Support protection of those source waters, support programs for capacity development by reviewing intended use plans
- Oversee security requirements connected with Homeland Security requirements for PWSs
- Provide support to the PWS operators licensing program by providing input on manuals and training
- Support the laboratory accreditation program as needed
- Support the Field Operations Support Division and the TCEQ Area & Regional Offices with technical assistance
- Refer PWSs that exceed compliance trigger levels agreed upon by the TCEQ and the EPA to the Enforcement Division



- Reviews CCI and inspection information for adherence to Data Quality Standards and completeness

### **Plan & Groundwater Section (WSD/OW/PGRS)**

The Plan & Groundwater Section (PGRS) manages and implements major programmatic responsibilities:

- Manage disbursement of Drinking Water State Revolving Funds (DWSRF or SRF)
- Coordinate use of those SRF funds with Texas Water Development Board
- Implement the Capacity Development program by ensuring that PWSs receive financial, managerial, and technical assistance
- Review and approval of plans and specifications for PWSs and to refer plans for innovative treatment to the PDWS
- Ensure and track compliance monitoring and compliance determination for chemical and microbiological standards and the Surface Water Treatment Rule (SWTR)
- Review and approve engineered plans for innovative water treatment, develop consistent policy for these activities, and document exceptions to the state design rules
- Maintain records and data for these programs

### **TCEQ Area & Regional Offices (OCE/Border and South Central Texas Area; OCE/Coastal and East Texas Area; OCE/North Central and West Texas Area)**

The TCEQ Area & Regional Offices have the responsibility for performing sanitary surveys (otherwise known as Texas Comprehensive Compliance Investigations). The Region's tasks include:

- Perform Sanitary Surveys (SS) every three years for community water systems and every five years for non-community water systems
- Report inventory data to the Public Drinking Water Section on the PWS Data Sheet, or as determined by TCEQ Information Technology
- Report violations of the TCEQ's rules and regulations (30 TAC 290 Subchapter D) to the Enforcement Division and appropriate water supply entity
- Report violations of the TCEQ's drinking water standards ( 30 TAC 290 Subchapter F and H) to the PDWS as areas of concern on the CCI report
- Report the number of CCIs completed to the OCE Field Operations Support Division (OCE/FOSD)

### **Field Operations Support Division (OCE/FOSD)**

The Field Operations Support Division (FOSD) has responsibility of providing support to the TCEQ Area & Regional Offices and participates in many of the PWSS Program elements:

- Rule changes to Texas Administrative Code (TAC) Chapter 290
- Assist the regions and the PDWS
- Convey information to and from the PDWS and the Regional Offices
- Prepare staff guidance, standard operating procedures and training for regional staff to ensure consistency within regions and with PDWS

- Laboratory accreditation program

### **Occupational Licensing Section (OPR/PRSD/OLS)**

The Operator Licensing Section (OLS) ensures that trained personnel will be available to PWSs. Their PWSS Program responsibilities include:

- License operators for community and non-transient non-community PWSs
- Maintain records of licensed operators including the level and type of license

### **Laboratory and Quality Assurance Section (OCE/FOSD/LQAS)**

The Laboratory and Quality Assurance Section (LQAS) manages the Laboratory Accreditation Program. This program's PWSS Program responsibilities include:

- Accredite laboratories for coliform and chemical analysis in the drinking water matrix according to NELAP
- Report on the number of labs accredited and the methods used for accreditation

### **Water Supply Division (OW/WSD)**

PWSS Program WSD management handled at the Division level includes the determination of policy and the collection of Public Health Service fees used as state-match for funds used to operate the PWSS Program.

## **IV. B. TCEQ PWSS Program - Personnel Description**

Individuals participating in the Texas PWSS program with a specific roles and responsibilities are illustrated in the below table.

**\*TCEQ PWSS Program - Personnel Description Table**

<b>Official</b>	<b>Position</b>	<b>Responsibilities</b>
Linda Brookins	Director, OW/WSD	<ul style="list-style-type: none"> <li>- WSD supervision (reference Appendix A), including PDWS supervision: <ul style="list-style-type: none"> <li>o Drinking water rules adoption</li> <li>o Plan review and approval</li> <li>o Compliance for chemical and microbial drinking water standards</li> <li>o Source water assessment and protection</li> <li>o Inventory and grant withholding</li> <li>o Data maintenance</li> <li>o Delivery of violation, action, and inventory data to EPA</li> </ul> </li> </ul>
Elston Johnson, R.S	Manager, OW/WSD/PDWS	<ul style="list-style-type: none"> <li>- Responsible for Public Drinking Water Section Teams supervision</li> <li>- Performance Partnership Grant Manager</li> <li>- Oversees the WSD coordinated efforts to ensure: <ul style="list-style-type: none"> <li>o drinking water rules adoption</li> <li>o compliance for chemical and microbial standards</li> <li>o source water assessment and protection</li> <li>o inventory and grant-withholding data maintenance</li> <li>o delivery of action data</li> </ul> </li> </ul>
James Beauchamp	Special Assistant, OW/WSD/PDWS	<ul style="list-style-type: none"> <li>- Manager of the Performance Partnership Grant</li> <li>- Oversees Public Health Services fee acquisition</li> <li>- Oversees Capacity development activities</li> </ul>

Official	Position	Responsibilities
Alicia C. Diehl, Ph.D	Team Leader, OW/WSD/PDWS/DWQT	<ul style="list-style-type: none"> <li>- Supervises the Drinking Water Quality Program personnel performing compliance determination and enforcement referral for SDWA components related to chemical drinking water quality, and inventory data acquisition.</li> <li>- Supervises the data transfer of drinking water compliance data to EPA's Safe Drinking Water Information System (SDWIS) required by the special primacy requirements.</li> </ul>
Grant Evans	Special Assistant for Data Management, OW/WSD/PDWS/DWQT	<ul style="list-style-type: none"> <li>- Responsible for data transfers related to drinking water inventory, violation, and action data to EPA</li> </ul>
Gary Regner	Drinking Water Compliance Sampling Contract Manager, OW/WSD/PDWS/DWQT	<ul style="list-style-type: none"> <li>- Oversees the chemical sampling contract and acts as agency liaison for the TCEQ contract sample collectors. Audits sample collectors.</li> <li>- Oversees PWSS QAPP production</li> <li>- Reviews and approves laboratories for total organic carbon testing and other selected analyses</li> <li>- Coordinates organic chemical compliance,</li> <li>- Acts as laboratory liaison communicating issues related to data quality</li> </ul>
Debra Cerda	Chemical Sample Schedule Coordinator, OW/WSD/PDWS/DWQT	<ul style="list-style-type: none"> <li>- Ensures that public water systems are scheduled for appropriate chemical sampling. Develops schedule for delivery, oversees scheduling aspects of the sampling contract, and distribution system sample sites</li> </ul>
John Schildwachter	Team Leader, OW/WSD/PDWS/DWPT	<ul style="list-style-type: none"> <li>- Supervises the Drinking Water Projection Team, which provides data for waiver/decreased monitoring determinations, source water susceptibility, and Consumer Confidence Reports</li> <li>- Provides input for approval of new wells to be used as drinking water sources</li> <li>- Supervises data transfer of drinking water compliance data to SDWIS required by the special primacy requirements</li> </ul>
Cari-Michel La Caille	Acting Manager, OW/WSD/PGRS	<ul style="list-style-type: none"> <li>- Supervises the PGRS including: <ul style="list-style-type: none"> <li>o Utilities Plan Review Team that has responsibility for approval of engineered systems related to drinking water</li> <li>o Technical Review and Oversight Team that has responsibility for compliance determination for SDWA components related to drinking water treatment, exceptions to Texas design rules, and Surface Water Treatment Rule requirements</li> </ul> </li> </ul>
Vera Poe, P.E	Team Leader, OW/WSD/PGRS/UTRT	<ul style="list-style-type: none"> <li>- Supervises the Utilities Technical Review Team that has responsibility for approval of engineered systems related to drinking water.</li> </ul>
Joel Klumpp	Team Leader (acting), OW/WSD/PGRS/TROT	<ul style="list-style-type: none"> <li>- Supervises the Technical Review and Oversight Program, which performs compliance determination for SDWA components related to drinking water treatment, exceptions to state design rules, and Surface Water Treatment Rule requirements</li> <li>- Supervises the data transfer of drinking water compliance data to SDWIS required by the special primacy requirements</li> </ul>
Dorothy Young	State Revolving Fund Manager, OW/WSD/PGRS/UTRT	<ul style="list-style-type: none"> <li>- Oversees grant funding of PWSS Program activities related to drinking water.</li> </ul>
David Bower, P.G.,	Director, OCE/FOSD	<ul style="list-style-type: none"> <li>- Directs a Field Operations Support Division FOSD programs</li> </ul>
June Ella Martinez	PDW Liaison, OCE/FOSD	<ul style="list-style-type: none"> <li>- Serves as the liaison between the TCEQ Regional Offices, the Enforcement Division, and Water Supply Division staff by providing FOSD and regional procedural updates to WSD, receiving sample collection and public water system data requirement updates from WSD, conveying Safe Drinking Water Act rule changes to regional staff, and negotiating appropriate procedural and policy changes as programmatic needs require.</li> </ul>
Tracy Miller	Water Program Team Leader, OCE/FOSD/Program Support Section/Water Team	<ul style="list-style-type: none"> <li>- Responsible for ensuring consistency of the Regional Water Programs activities with the EPA requirements for inventory data generation and sanitary surveys (aka Comprehensive Compliance Investigations or CCI's) by Division staff in the Border and South Central Texas, Central and East Texas, and North Central and West Texas Divisions of OCE.</li> </ul>
Water Section Managers	Sixteen Regional Field Offices, TCEQ/OCE	<ul style="list-style-type: none"> <li>- Responsible for monitoring the activities of regional investigators to produce sanitary surveys (CCIs) and collect complaint samples. Ensure quality of sanitary surveys (CCIs) conducted at public water systems by the regional staff.</li> </ul>

Official	Position	Responsibilities
Steve Stubbs	TCEQ Quality Assurance Manager (QAS), OCE/FOSD	<ul style="list-style-type: none"> <li>- QA oversight responsibilities for TCEQ divisions and functions in accordance with provisions of the EPA approved agency Quality Management Plan (QMP).</li> <li>- Supervises accreditation of laboratories used for drinking water sample analysis currently according to NELAP.</li> </ul>
Bryan Sinclair	Director, OCE/ED	<ul style="list-style-type: none"> <li>- Responsible for enforcement activities related to public water systems that fail to comply with the Safe Drinking Water Act and its amendments</li> </ul>
Sandy VanCleave	PDW Liaison, OCE/ED/Drinking Water and Special Function Section/Drinking Water Team	<ul style="list-style-type: none"> <li>- Responsible for enforcement activities related to public water systems that fail to comply with the SDWA</li> </ul>
Allan Vargas	Manager, Occupational Licensing Section, OPR/PRSD	<ul style="list-style-type: none"> <li>- Directs Operator Licensing Program.</li> </ul>
Dwight Schaeper	Manager, Texas Department of State Health Services Laboratory Services Section	<ul style="list-style-type: none"> <li>- Responsible for overseeing the analysis of public drinking water samples</li> </ul>

\*This table is summarized from the TCEQ Quality Assurance Project Plan (QAPP) for the PWSS Program approved on November 9, 2010, and effective until November 9, 2013.

## V. Primacy Review

### V. A. Primacy Requirements

TCEQ continues to meet the federal primacy requirements listed in Appendix D upholding public drinking water program primacy. The SDWA includes a requirement that EPA establish and enforce such standards as maximum contaminant levels (MCL), treatment techniques, and the monitoring that PWSs must adhere to. Texas is required to maintain a PWSS program in order to retain primary enforcement authority (primacy) over Texas PWSs compliance with the Safe Drinking Water Act (SDWA). The PWSS federal requirements are documented in the National Primary Drinking Water Regulations (NPDWR) of Title 40, Code of Federal Regulations (CFR), Chapters 141 and special primacy requirements Chapter 142. TCEQ PWSS program deliverables are summarized in the below Table.

**Texas PWSS Program Deliverables Summary Table**

Category	Deliverables
Data	<ul style="list-style-type: none"> <li>- Quarterly Texas PWSs inventory and grant-withholding data</li> <li>- Quarterly SDWA violations, formal and informal compliance actions</li> <li>- Annual Compliance Report data evaluation</li> <li>- Responses to quarterly Significant Non-Complier (SNC) list or new Tiered SNC list</li> </ul>
Reports/ Review	<ul style="list-style-type: none"> <li>- Annual Grant Management Report</li> <li>- Annual Compliance Report (ACR) detailing the compliance status of Texas PWSs to EPA</li> <li>- Triennial QAPP</li> <li>- EPA Data Verification Audit as requested</li> <li>- Annual EPA PWSS Program Review</li> <li>- Annual list of labs accredited for drinking water analyses</li> <li>- Annual report on operator licensing and training activities</li> <li>- Capacity Development Reports (triennial historical SNC list coding, triennial Governor's report, and Annual Capacity Development report)</li> </ul>
Primacy	<ul style="list-style-type: none"> <li>- Manage and administer EPA funding;</li> </ul>

Category	Deliverables
Primacy	<ul style="list-style-type: none"> <li>- Deliver accurate and timely PWS inventory, violation, lead/copper rule milestones, site visit, and action data</li> <li>- Adopt rules at least as stringent as the NPDWRs</li> <li>- Ensure compliance monitoring and compliance determination for chemical and microbiological standards, ensure initial water quality meets minimum standards before approving a new source;</li> <li>- Assess the source water susceptibility of drinking water sources and provide support to help public water systems protect those source waters;</li> <li>- Review and approve engineered plans for PWS infrastructure improvements;</li> <li>- Support capacity development programs</li> <li>- Oversee compliance with and provide technical assistance for Homeland Security requirements for PWSs;</li> <li>- Perform PWSs sanitary surveys (source, treatment, distribution, storage, pump facilities, data verification, management, operation, and operator compliance)</li> <li>- Ensure formal enforcement action for PWSs that exceed compliance trigger levels agreed upon by the TCEQ and the EPA;</li> <li>- Maintain a drinking water laboratory accreditation program</li> <li>- Maintain a PWS operators licensing program</li> </ul>

## V. B. SDWA PWSS Program Revisions

Texas holds primacy for the TCR, CCR, Phase II/V, LCR, SWTR, IESWTR, LT1 IESWTR, Arsenic, Stage 1 DBPR, PN, FBRR, and the Interim and Revised Radionuclides Rules. Texas has extension agreements in place for Stage 2 DBPR, LT2 ESWTR, GWR and the LCR/STR.

### 1) Primacy Revision Applications

TCEQ is seeking to prepare complete-and-final drinking water rule applications to achieve final primacy revision approval incorporating six SDWA rules:

- Long Term 2 Enhanced Surface Water Treatment Rule (LT2)
- Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)
- Ground Water Rule (GWR)
- Public Notification Rule minor revisions (PN/MR)
- Variance and Exemptions Regulations (V&E)
- Lead and Copper Rule Short Term Revisions (LCR/STR)

TCEQ intends to submit three successive primacy revision submissions:

1. DBP2, LT2, V&E, and PN/MR (Four Rule Package)
2. GWR
3. LCR/STR

**Primacy Determination Background:** EPA final determination includes the following:

- Regional Review (and approval)
- EPA Office of Regional Council (ORC) approval
- EPA HQ Review and approval of EPA R6 LT2, DBP2 and GWR crosswalk comments. (EPA HQ will not need to review PN/MR or V&E crosswalks)
- Public Notice
- Opportunity for Hearing
- EPA's Final Determination

The final program complete-and-final primacy revision package consists of:

- Adopted Texas Regulations
- Final approved regulation Crosswalks (side-by-side State and EPA rule citation comparison)
- Texas Attorney General's Enforceability Certification

**DBP2, LT2, V&E, and PN/MR - Four Rule Package:** TCEQ is preparing the complete-and-final four rule package final primacy revision application for EPA R6 review and approval. EPA R6 Office of Regional Council confirmed that the LT2, ST2 and PN/MR crosswalks will not be approvable by EPA until all the citations are equivalent to the federal language. The citations, identified by EPA as not as stringent as the federal rules, will need to be revised in the State rule language to comprise a complete-and-final crosswalk. TCEQ intends to update these citations in the Texas Administrative Code as part of the LCR/STR Texas legislative process beginning January 2011. TCEQ intends to implement the LT2, ST2 and PN/MR according to the Federal requirements (pending state regulation revisions) in the interim. TCEQ has LT2, ST2, and PN/MR interim enforcement authority pursuant to 40 CFR 142.13 (e).

The V&E was adopted by TCEQ in October, 2005. The latest V&E crosswalk was created by direct reference to the federal regulations. There is no V&E primacy revision application deadline. EPA received V&E AG Certification on May 5, 2008. EPA needs to receive any TCEQ V&E crosswalk updates and CFR 142 documentation to complete the primacy package. While the V&E crosswalk is relatively short, CFR 142 contains most of the V&E documentation the State needs to provide.

The PN/MR crosswalk is in the EPA review and approval process. Although the PN primacy deadline was May 6, 2004, TCEQ has implemented the PN rule in the interim by using internal guidance consistent with the minor revisions.

**GWR:** TCEQ is preparing the GWR final primacy revision package. TCEQ intends to implement the GWR according to the Federal requirements in the interim. TCEQ has GWR interim enforcement authority pursuant to 40 CFR 142.12 (e).

**LCR/STR:** TCEQ is drafting LCR/STR rule language to clarify the EPA rule to complete the draft primacy application and finalize TCEQ State adoption.

## 2) **Approved Primacy Revisions**

As shown in Appendix E- TCEQ primacy Table – Texas achieved final primacy approval on December 29, 2006, in accordance with 40 CFR §142.13, for three rules:

- Lead and Copper Rule Minor Revisions (LCRMR)
- Filter Backwash Recycling Rule (FBRR)
- Long Term 1 Enhanced Surface Water Treatment Rule (LT1)

TCEQ similarly received final primacy approval for:

- Two rules in September, 2005:
  - Arsenic Rule
  - Radionuclides Rule
- Three rules in August, 2001:
  - Consumer Confidence Report Rule (CCR)
  - Interim Enhanced Surface Water Treatment Rule (IESWTR)
  - Stage 1 Disinfectants and Disinfection Byproducts Rule (Stage 1 DBPR)
- And two SDWA statutory requirements in August, 2001:
  - Administrative Penalty Authority
  - New Definition for Public Water System

## III. C. **Drinking Water Rules Implementation**

Appendix F shows EPA's drinking water Performance Activity Measures (PAMs). Appendix H shows the Texas top 50 water systems in violation by population. And lastly, the PWS violation tables are shown in Appendix I and J. Appendix I shows the Texas FY 2010 Number of Systems with Violations Table and Appendix J shows the Number of Total Violations Table.

TCEQ achieved PAMs results that exceed the targets illustrated in Appendix F. One of the drinking water measures reflecting public health improvements is 2.1.1 - Water Safe to Drink: The EPA Region 6 FY 2010 2.1.1 goal is 90.3%. The Texas 2.1.1 rate achieved is 93.1%, higher than the EPA goal. EPA commends TCEQ for Texas water system performance above and beyond the PAMs expectations.

### 1) **Chemical Monitoring**

**Compliance Agreements:** the TCEQ inorganic contaminant (IOC) and Radionuclide (Rad) violations primary enforcement action are Compliance Agreements (CA). TCEQ CAs (also referred to as Bilateral Compliance Agreements) have enforceable three year end dates, except for Fluoride violations that have a five year closing date.

**a) Inorganic Contaminants (IOCs)**

Texas IOC violations are illustrated in the Table below.

**Texas FY 2007 to FY 2009 IOC MCL Violation Table**  
Summarizing FY SDWIS/Fed data

Contaminant	FY 2008 PWSs	FY 2008 Violations	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations
Arsenic	91	229	101	262	117	355
Fluoride	34	72	39	93	39	118
Nitrate	54	114	66	145	59	131
IOC Total	179	415	206	500	215	604

**Arsenic:** the new arsenic 10 parts per billion (ppb) EPA drinking water rule became effective on February 22, 2002. The date by which systems must comply with the new 10 ppb standard was January 23, 2006. When a Texas PWS exceeds the Arsenic MCL, TCEQ requires quarterly public notices. To resolve the violation, PWS must seek either treatment methods or alternative water sources. Feasibility Studies are required as part of the CA to investigate the available options and determine the costs (capital and operation-and-maintenance). TCEQ can provide financial assistance through a contractor (i.e. TRWA) or the PWS can hire a consultant. The non-treatment options include either 1) obtain a new source, or 2) isolate the low arsenic well water level. The arsenic treatment options include:

- Removal and blending
- Adsorption medias (Ferric Oxide & Activated Alumina)
- Ion Exchange
- Hybrid-Ion Exchange/Adsorption Media
- Precipitation and filtration
- Reverse Osmosis
- Point-of-use/point-of-entry (POU / POE)

Typical Funding Options include:

- Drinking Water State Revolving Fund (DWSRF)
- Rural Development (USDA)
- Rate Increase
- TWDB special funding

**Nitrate / Nitrite:** TCEQ requires systems to sample for nitrate annually. TCEQ is requiring nitrite quarterly repeat sampling for systems with initial monitoring results greater than one-half the 10 mg/L MCL. Such monitoring is at the discretion of the State. TCEQ is also requiring systems with initial monitoring results greater than or equal to the MCL to perform quarterly nitrites sampling, which can only be reduced to annual sampling after four consecutive quarterly samples below the MCL.



**Fluoride:** EPA set the enforceable maximum drinking water fluoride MCL of 4 mg/L. Fluoride has a secondary standard of 2 mg/L to protect against dental fluorosis in children. Fluoride can occur naturally in water. Many Texas communities add fluoride to their drinking water to promote dental health. Texas communities can determine whether or not to add fluoride. Four treatment methods are suitable for removing fluoride from drinking water, including:

- Activated alumina filters
- Distillation
- Reverse osmosis
- Anion exchange
- POU / POE

Texas violators of either the fluoride MCL or secondary standard are required to produce a feasibility study under a CA, provide good water to children, sample quarterly or annually, and provide public notification quarterly or annually. Secondary fluoride violation only has to be sampled annually and send public notice annually.

#### **b) Radionuclide (Rad)**

The revised Rads Rule came into effect on December 8, 2003. Regulated Rads include Combined Radium (radium-226 and radium-228) Gross Alpha particle activity, Combined Uranium (U), and beta particle and photon radioactivity. No Texas systems have been found to be vulnerable and thus required to monitor for Gross Beta.

TCEQ reportedly discontinued laboratory error-margin-subtraction, including for Rads, beginning January 1, 2009. As shown in the following Rads Violation Table, there were 71 FY 2010 Systems with Rads violations.

**Texas FY 2008 to FY 2010 Rads Violation Table**

Summarizing FY SDWIS/Fed data

Contaminant	FY 2008 PWSs	FY 2008 Violations	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations
Combined Radium	20	31	30	26	32	51
Gross Alpha	14	10	24	21	30	47
U	6	21	11	11	9	15
Rad Total	40	62	65	55	71	113

#### **d) Phase II/V Rule**

**Synthetic Organic Chemicals (SOC):** as shown in Appendix I, there are 3 FY 2010 Texas PWSs that have 3 SOC MCL violations. As illustrated in Appendix H, one Texas water system received two Di(2-ethylhexyl) phthalate MCL violations. The major source of di(2-

ethylhexyl) phthalate in drinking water is discharge from rubber and chemical factories. The greatest use of di(2-ethylhexyl) phthalate is as a plasticizer for polyvinylchloride (PVC). TCEQ reported that the above Texas Di(2-ethylhexyl) phthalate violation most likely derived from new PVC water piping.

**Volatile Organic Chemicals (VOC):** if VOC-tank coating chemicals (i.e. solvents, polyvinyl chloride cleaners, and primers) are detected, TCEQ does not perform quarterly follow-up sampling. The associated TCEQ study is available upon request. This practice is currently not approved by EPA Region 6.

## **2) Total Coliform Rule (TCR)**

As shown in Appendix I, there are 61 FY 2010 Texas PWSs that have 67 TCR MCL violations. TCR MCL population based violations continue to be a large portion of the total. As derived from Appendix H, approximately \*53% of those “Texas top 50 systems in violation by population” are due to TCR violations.

$*53\% = 784,820 \text{ (TCR MCL violation population affected)} / 1,481,800 \text{ (Sum of top 50 system's population)} \times 100(\%)$ .

## **3) Ground Water Rule (GWR):**

Texas Ground water systems began compliance with the GWR by the December 1, 2009 closing date. Ground water systems will either be 1) treating their water to at least 4-log virus removal/inactivation as approved by the State or 2) conducting compliance monitoring, or conduct triggered source water monitoring for the presence of a fecal indicator (i.e., E. coli for Texas) in response to positive sample results from monitoring under the Total Coliform Rule (TCR). In addition, the GWR now provides consistency with Subpart H systems for sanitary surveys. All community and non-community ground water systems will be on a 3 and 5 year survey cycles, and all ground water systems will be surveyed for the same eight elements identified for subpart H water systems. Corrective action is required for ground water systems, as directed by the TCEQ, for positive source water sample results or significant deficiencies.

Texas adopted the GWR but does not have final primacy. Texas has interim GWR enforcement authority as long as TCEQ implements the rule according to the federal citations and / or the EPA approved / equivalent Texas citations. TCEQ therefore can continue to perform compliance determination including public notification violations and sanitary survey significant deficiencies for enforcement without referring to EPA.

## **4) Lead/Copper Rule (LCR)**

TCEQ provides technical assistance to systems with lead or copper ALEs. Technical assistance is generally provided by the TRWA contractors. TCEQ downloads LCR sample data once a week from the LCRA-ELS laboratory. In 2010-2011, TCEQ will continue to contract with LCRA to complete LCR analysis.

## **5) Filter Backwash Recycling Rule (FBRR)**

Under the FBRR, Texas water systems that use surface water or groundwater under the direct influence of surface water (GUI), practice conventional or direct filtration, and recycle spent filter backwash, thickener supernatant, or liquids from dewatering processes must complete and submit the TCEQ Water Treatment Plant Recycling Practices Report (RPR); providing the required recycle notification. There are over 450 surface water plants in Texas that are subject to the FBRR. New Texas drinking water treatment plants are required to recycle at the beginning of treatment. FBRR records (required to be kept on file at the system) are reviewed by the FOD investigators during CCIs.

## **6) Consumer Confidence Report Rule (CCR)**

CWSs must submit to TCEQ: 1) a copy of the CCR by July 1<sup>st</sup> annually, and 2) within three months of the required CCR delivery date, a certification that the CCR was correctly distributed. As illustrated in Appendix I & J, there are currently 487 systems with 851 CCR violations in Texas.

TCEQ continues the contractual interagency agreement with the Texas Engineering Extension System (TEEX) to utilize UT Arlington students to review CCRs and perform CCR sorting, data entry, and data verification.

## **7) Surface Water Treatment Rule (SWTR)**

Texas requires surface-water systems to filter. There are currently no known/reported uncovered finished water reservoirs in Texas.

## **8) Interim Enhanced Surface Water Treatment Rule (IESWTR) and Long Term 1 Enhanced Surface Water Treatment Rule (LT1)**

Surface water systems or GU systems serving 10,000 or more people are required to comply with IESWTR provisions (e.g., turbidity standards, individual filter monitoring) as of January 1, 2002. Based on IESWTR individual filter monitoring requirements, TCEQ arranges for a mandatory Comprehensive Performance Evaluation (mCPE). Specifically, systems must conduct a CPE if any individual filter has a measured turbidity level of greater than 2.0 NTU in two consecutive measurements taken 15 minutes apart in two consecutive months.

In FY 2010, Texas water systems continued to receive technical assistance through TCEQ's Special Performance Evaluation (SPE) program; a formal process for data verification. TCEQ also targets systems for assistance through TCEQ's TOP.

## 9) Sanitary Surveys

The FY 2010 Texas SDW-1a currently queried by EPA is 89%. However, the EPA FY 2010 measure was reported as 59% as shown in the Appendix G SDW-1a Table. The Texas SDW-1a was underreported due to a SDWIS-Texas reporting issue. This specific data base problem has been remedied as confirmed by EPA in the current SDWIS-Fed database via a SDW-1a 3/22/2011 query.

SDW1a is currently derived from SDWIS-Fed each year in July. The FY 2010 measure is for the three calendar year period of 2007, 2008, and 2009. SDW-1a is defined as “Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface water Treatment Rules.”

The FOD goal is to complete CCIs every three years for CWSs and every five years for NCWSs. Approximately 60 inspectors in the FOD conduct CCIs. TCEQ continues to use an Enforcement Initiation Criteria category system. Category “A” violations rate automatic enforcement activities; Category “B” violations rate enforcement if a system has two deficiencies in a five year period; and Category “C” violations trigger enforcement if a system has three deficiencies in a five year period. Depending on the severity of the deficiency, systems have a range of response times. The most critical deficiencies must be corrected within 24-hours and the least critical must be corrected within 180 days, unless some sort of approval (i.e., for construction) is involved.

## 10) Stage 1 Disinfectants and Disinfection Byproducts Rule (DBP1)

DBP1 PWS MCL violations are shown in the below table. There are more that 5500 DBP1 affected systems. The primary DBP1 enforcement actions are:

- Administrative Orders (AO) for wholesale (sellers) water systems and
- CAs for consecutive (purchaser) water systems

**DBP1 Violation Table**  
Summarizing FY SDWIS/Fed data

Contaminant	FY 2008 PWSs	FY 2008 Violations	FY 2009 PWSs	FY 2009 Violations	FY 2010 PWSs	FY 2010 Violations
TTHM	158	271	110	212	90	211
HAA5	45	78	34	65	31	57
DBP1 Total	203	349	144	277	121	268

## 11) Stage 2 Disinfectants and Disinfection Byproducts Rule (DBP2)

TCEQ conducted DBP2 Early Implementation (EI). Texas water systems on Schedules 1-4 have completed their IDSE monitoring and submitted their Reports. EPA commends TCEQ for exceptional DBP2 EI performance.

## 12) Long Term 2 Enhanced Surface Water Treatment Rule (LT2)

Texas LT2 systems began sampling on October 1, 2007. Monitoring involves two years of *Cryptosporidium* monthly sampling. EPA agreed to provide TCEQ LT2 EI assistance, including after TCEQ obtains final primacy. EPA is responsible for reviewing LT2 information submitted by Schedules 3 and 4 water systems including:

- Letters of intent
- Standard monitoring plans
- Source water monitoring plans

Texas PWSs that exceed the *E. coli* benchmark are required to monitor for *Cryptosporidium* as required under LT 2 (reference web address <http://water.epa.gov/lawsregs/rulesregs/sdwa/lt2/regulations.cfm> for complete LT 2 federal requirements). As of February 4, 2010, EPA reviewed LT2 and issued a memorandum with a new *E. coli* benchmark level to allow a higher *Cryptosporidium* trigger level for water systems. The new *E. coli* trigger level for *Cryptosporidium* is an average 100 *E. coli* colonies/100mL for lakes, reservoirs, and flowing streams. On February 4, 2010, the TCEQ began contacting applicable PWSs to inform that system of its LT2 status based on the new *E. coli* benchmark.

Texas Schedules 1 to 3 systems have reported their Bin determinations. Schedule 4 Systems (i.e. that serve no more than 9,999 people and obtain any portion of their water from a surface or GUI source) begin sampling on October 2008. This includes approximately 225 small water systems that will report Bin determinations by December 2010.

## 13) Lab Accreditation Program

Since July 1, 2008, TCEQ offers accreditations for environmental laboratories according to standards adopted by the National Environmental Laboratory Accreditation Conference (NELAC) using methods approved by EPA. The authority to create a laboratory accreditation program in Texas has been established by Texas Water Code, Chapter 5, Subchapter R. Until July 1, 2011, Texas lab accreditation is based on an environmental testing laboratory's conformance to NELAC standards. After June 30, 2011, Texas accreditation will be based on an environmental testing laboratory's conformance to the most current standards adopted by the National Environmental Laboratory Accreditation Program. Accredited Texas laboratories are available on the following web address:

[http://www.tceq.state.tx.us/assets/public/compliance/compliance\\_support/qa/txnelap\\_lab\\_list.pdf](http://www.tceq.state.tx.us/assets/public/compliance/compliance_support/qa/txnelap_lab_list.pdf)

## III. D. Data Management

Timeliness and completeness of Texas SDWA data submitted to SDWIS-FED must continue to be improved. With the quarter ending December 31, 2009, TCEQ failed to submit complete and timely data to SDWIS-FED for four of the last seven quarterly updates. Texas did not achieve the FY 2010 national sanitary survey performance measure reportedly due to federal

data reporting challenges. EPA recommends that TCEQ continue to commit to provide adequate resources; including additional FTE support as needed, to improve public drinking water federal reporting timeliness, completeness, and the accuracy of compliance determinations and inventory data.

TCEQ reported that it will continue to direct resources toward the installation, testing, and production of Safe Drinking Water Information System (SDWIS) and its compliance modules. TCEQ and EPA continue to agree that SDWIS data management is a necessary step to address the issue of timely enforcement and data reporting that has been an area of concern for several years. TCEQ intends to provide more general SDWIS availability to enhance overall program efficiency and improve compliance determination and federal reporting.

TCEQ WSD will continue to use, as primary enterprise databases, both 1) the Water Utilities Database (WUD) for inventory and sanitary surveys and 2) the Consolidated Compliance and Enforcement Data System (CCEDS) for enforcement and detailed information relating to sanitary surveys. TCEQ currently uses SDWIS/State for TCR implementation, SWTR data, and PWS inventory and compliance determination.

**The 2010-2011 SDWIS-Texas Improvement project:** TCEQ will add "SDWIS Document Tracking" to SDWIS-State by way of an EPA SAIC contract. Adding document management in SDWIS will integrate an integral piece of Texas WUD to include the Texas Exception process. These upgrades will apply / be-available to all SDWIS users. The budget ceiling is \$200,000. The funding is from the Texas FY 2010 PWSS allotment. Dianne Sales (214-665-7556) is the EPA contact to receive the revised PWSS grant work plan integrating the SDWIS modification project. This budget is to pay for an "in kind contract" with SAIC. EPA already has a contract with SIAC that can incorporate this project.

## VI. 1996 SDWA Amendments Initiatives

### VI. A. Source Water Protection (SWP)

TCEQ did not achieve the FY 2010 Source Water Protection Performance Measures SP 4(a) and (b) illustrated in Appendix G and summarized in the below table.

**FY 2010 SWP Performance Measure Table**

Strategic Targets	EPA Target	EPA R6 Results	TCEQ Results
*SP 4(a)	36%	38%	32%
*SP 4(b)	60%	63%	59%

TCEQ should raise implementation efforts to increase the number of Texas community water systems and population served where risk to public health is minimized through source

water protection and / or correct any requisite SDWIS data reporting issues. TCEQ should coordinate with EPA as necessary to attain future FY 2011 EPA SWP Performance Measures.

EPA's goal is to increase the number of community water systems with minimized risk to public health through development and implementation of protection strategies for source water areas (as counted by TCEQ) from a baseline of 20% of all areas in FY 2005 to 50% in FY 2011 (see measure SP-4a). EPA also has a goal of maintaining the percent of the population served by these community water systems at 60% in FY 2011 (see measure SP-4b).

TCEQ offers PWS support to identify and implement measures that will protect their sources of water. Texas Source Water Protection is a voluntary program that helps PWSs to protect their drinking water. Locally controlled and implemented, a Texas SWP program is designed to protect drinking water sources from potential sources of contamination.

TCEQ continued the FY 2008 to 2010 contract with CDM to provide SWP project assistance to up to 20 CWSs annually. TCEQ has a new three year SWP assistant contract with PBS&J to conduct similar assistance to 20 CWSs annually beginning in FY 2011. Additionally, TRWA continues to assist TCEQ with SWP plans under a TCEQ contract. The TCEQ SWP program utilizes a GIS Server to access topographic data. As a result of the Texas SWAP program, TCEQ established and maintains a database of potential threats to contamination of public drinking water supplies. This database plays a role in assisting TCEQ to integrate its SWP program activities with other State and EPA programs.

In FY 2011, EPA will continue supporting state and local efforts to identify and address current and potential sources of drinking water contamination. These efforts are integral to the sustainable infrastructure effort because source water protection can reduce the need for expensive drinking water treatment, along with related increased energy use and costs, which, in turn, can reduce the cost of infrastructure. In FY 2011, the Agency will continue to:

- Work with national, state, and local stakeholder organizations and the multi-partner Source Water Collaborative to encourage broad-based efforts directed at encouraging actions at the state and local level to address sources of contamination identified in source water assessments
- Support source water protection efforts by providing training, technical assistance, and technology transfer capabilities to states and localities, and facilitating the adoption of Geographic Information System (GIS) databases to support local decision-making
- Work with states, tribes, and other stakeholders to characterize current and future pressures on water availability, variability and sustainability (WAVS) in the face of climate change

EPA will also continue working with federal programs to align source water preservation and protection with their priorities. In particular, EPA is working to integrate source water protection into Clean Water Act programs like the watershed approach and storm water management. State water quality standards set the benchmarks for surface water quality under the Clean Water Act and minimum instream flow regimes that protect aquatic habitats will also

preserve surface water and ground water supplies for all uses. States, and tribes, and communities should review these standards and regimes to make sure their source waters will be preserved and protected.

EPA will additionally continue working with other federal agencies like the U.S. Forest Service to maintain healthy land cover and the U.S. Department of Agriculture on land conservation programs and best management practices to protect water quality. EPA encourages states and communities to leverage these programs to preserve and protect drinking water supplies.

## **VI. B. Capacity Development**

Section 1420(a) of the SDWA requires States to develop legal authority or other means to ensure that new CWSs and new NTNC water systems have financial, managerial, and technical (FMT) capacity with respect to each national primary drinking water regulations. Section 1452(a)(1)(G)(i) requires EPA to withhold 20% of a State's DWSRF capitalization grant unless the State meets the requirements for new system capacity authority under Section 1420(a). In addition, under Section 1420(c), States are required to develop a capacity development strategy for existing drinking water systems to avoid 20% withholding.

TCEQ provided the Texas FY 2010 Capacity Development program status by submitting the TCEQ Capacity Development Implementation Annual Report to EPA on September 29, 2010. This report provided information that addresses the SDWA capacity development withholding provisions. EPA determined that the report's content demonstrates that TCEQ is implementing a strategy to assist public water systems in acquiring and maintaining technical, managerial, and financial capacity. Region 6 is satisfied with the progress of TCEQ's Capacity Development program. EPA will request that TCEQ submit to EPA the Texas Public Water System Capacity Development Report to the Governor next fall, 2011, for future FY 2012 DWSRF application processing.

**Texas Water Infrastructure Coordinating Council (TWICC):** TWICC's origin came from a meeting that was held at TCEQ's Waco Regional Office on March 4, 2010 to discuss options for small systems with arsenic and uranium non-compliance problems. A resultant April 20, 2010 meeting was convened at the J.J. Pickle Research Campus in Austin that was facilitated by the New Mexico Environmental Finance Center. TWICC was created in this meeting as a result of the participants' desire to create an inter-agency group to coordinate funding to small water and wastewater systems in a comprehensive and efficient manner. Meeting participants included representatives from EPA Region 6, NMEFC, TCEQ, United States Department of Agriculture Rural Development (USDA-RD), Texas Water Development Board (TWDB), Texas Rural Water Association, (TRWA), Texas Department of Rural Affairs (TDRA), Rural Communities Assistance Program Community Resource Group (RCAP-CRG), North American Development Bank, Parsons, Steve Walden Consulting, and the Birome WSC.

TWICC was formed to allow stakeholders; to include TRWA, TCEQ, TDRA, USDA-RD, RCAP-CRG, and other federal and state partners to collaborate on funding and regulatory issues for water and wastewater infrastructure. TWICC now officially collaborates to identify water and wastewater infrastructure and compliance issues and to seek affordable, sustainable



and innovative funding strategies for the protection of public health and the efficient use of government resources in Texas.

**Small System Equitable Consideration:** EPA HQ is following through on the commitment that EPA made as part of the 2010 Budget “*to work with State and local governments to address Federal drinking water policy in order to provide equitable consideration of small system customers.*” EPA’s approach for the equitable consideration of small system customers more actively encourages and supports TCEQ’s utilization of small system compliance and sustainability tools. This includes targeting financial support to small systems including the DWSRF disadvantaged assistance program, working more closely with USDA, strengthening capacity development tools, and promoting restructuring of non-sustainable systems. The basic principles are summarized as:

1. Access to safe drinking water should not be based on ability to pay. Every American served by public water systems should receive safe drinking water.
2. Provide small systems a hand-up not a hand-out.
3. Employ a variety of strategies to address the full spectrum of needs.
4. Ensure long-term sustainability of small systems.
5. Better target assistance to those small systems that are most in need.

## **VI. C. EPA Drinking Water Grants**

### **1. PWSS grant (PPG)**

- a. TCEQ received \$6,599,000 in PWSS funds in FY 2010:
  - \$4,949,250 was awarded on January 11, 2010
  - \$1,000,000 was awarded on May 18, 2010
  - \$ 649,750 was awarded on September 16, 2010
- b. The tentative 2011 PWSS allocation is \$6,603,000. However, there may be a rescission to that amount so that the final allocation may be less.
- c. EPA expects to be able to award funding during the first quarter of FY 2011. A partial award is expected to be made to TCEQ by the end of December, 2010.

### **2. DWSRF Set-asides – Unliquidated Obligations (ULOs)**

The total Drinking Water State Revolving Fund (DWSRF) Texas distribution (State Allotment) FY 2009 appropriation was \$67,112,000. The FY 2009 American Recovery and Reinvestment Act (ARRA) distribution was \$160,656,000. TCEQ did not utilize ARRA grant set-asides. The Texas total FY 2010 DWSRF distribution is \$86,254,000. That award was made on September 16, 2010. Texas did not utilize the 15% Local Assistance Set-Asides in FY 2009 or FY 2010.

The TCEQ ULOs, as of August 31, 2010, are summarized in the table below. The FY 2009 DWSRF grant was not awarded until the end of FY 2009. ULOs continue to be an issue,

due to the federal budget, therefore TCEQ is encouraged to draw down DWSRF set-aside funds for expenses in a timely manner.

<b>DWSRF Grant Number</b>	<b>Total ULO for TCEQ</b>	<b>Technical Assistance (2%)</b>	<b>State Programs Management (10%)</b>	<b>Local Assistance (15%)</b>
FS99679512(FY08)	\$598,080	\$598,080	0	Not Used
FS99679513(FY09)	\$6,559,751	\$1,342,240	\$5,217,511	Not Used
<b>TOTALS</b>	<b>\$7,157,831</b>	<b>\$1,940,320</b>	<b>\$5,217,511</b>	<b>NA</b>

### **3. Drinking Water Operator Expense Reimbursement Grant (ERG) and Homeland Security Grant**

TCEQ had a balance of \$509,253 remaining in its \$9.642M ERG grant, as of September 9, 2010. These funds were drawn down to cover expense invoices by the November 30, 2010 closing date.

The Texas Homeland Security Grant was awarded for \$781,725, and expired on August 31, 2010. TCEQ drew down these funds prior to the November 30, 2010 closing date.

### **4. Quality Assurance (QA) Requirements**

EPA approved the PWSS Quality Assurance Project Plan (QAPP) relating to the SDWA that was received by EPA on September 15, 2010. This QAPP was approved on November 9, 2010. This new QAPP is effective for three years, or until November 9, 2013. QAPPs can be approved for up to four years.

EPA requests that TCEQ submit the next QAPP update at least 60 days prior to expiration to allow for technical review and processing at EPA. Therefore, a revision would be due to EPA by September 9, 2013. TCEQ may revise the PWSS QAPP and submit an update to EPA at any time.

### **5. Needs Survey**

EPA uses the Drinking Water Infrastructure Needs Survey and Assessment (DWINSA or Needs Survey) results to allocate DWSRF funds to the States and Tribes as required by the SDWA. The State DWINSA is conducted every four years. A Tribal Needs Survey was conducted 12 years ago in 1999. EPA will conduct a new Tribal Needs Survey in 2011.

The Needs Survey statistical inventory includes CWS and not-for-profit non-community water systems. Projects must be DWSRF eligible and meet specific documentation requirements. The 2007 Survey data is used to determine the FY 2010 to FY 2013 DWSRF allocation allotments. The 2011 Survey will determine the allotments for four fiscal years starting with FY 2014.

The Texas DWINSA reported 20-year need (in millions of January 2007 dollars) was 33,730 in 2003 and 26,131 in 2007. This is a 22.5 % drop in estimated need. Projects qualify if they are designed for “reasonable growth”. Projects do not qualify if the sole purpose is interpreted as growth. Many 2007 Texas projects (typically new infrastructure such as water pipeline projects) were rejected because independent documentation requirements were not presented. Eligible projects need to be accepted into the 2011 survey to accurately represent Texas needs.

Key 2011 DWINSA changes (compared to the 2007 survey) include the:

- More rigorous infrastructure replacement documentation requirements to “level” the individual State results
- State Small Systems (serving 3,000 and fewer persons) will not be surveyed directly but will be estimated from the 2007 Survey
- Incorporation of Green Projects and Climate Change projects (if associated with an otherwise qualifying projected)

#### **VI. D. Operator Certification**

**Expense Reimbursement Grant (ERG):** The Texas \$9.642M ERG grant project began on October 1, 2002 and expired on August 31, 2010. The purpose of the ERG was to reimburse the costs of training, including an appropriate per diem for unsalaried operators, and certification for persons operating community and NTNC public water systems serving 3,300 persons or fewer people.

There are currently about 15,240 licensed Texas water system operators. TCEQ issued 2,410 new licenses, and renewed 2,960 licenses in FY 2010. TCEQ continued cluster training to water system operators. TCEQ uses contractors to conduct coupon training and cluster training for small water systems operators. There are more than 4,500 eligible small water system operators in Texas. Operators can use coupon training to obtain, renew, or upgrade a license. Cluster training provides training to operators in a limited geographical area in key concepts of water system operation.

TCEQ continued computer based testing in FY 2010. System operators can now take the operator certification test at multiple locations around Texas such as college campuses. About 5940 FY 2010 Texas operator license exams were taken.

#### **VI. E. Unregulated Contaminant Monitoring Rule – Cycle 2 (UCMR2)**

The 1996 SDWA Amendments requires EPA to establish criteria for an unregulated contaminants monitoring program and to publish a list of contaminants to be monitored. The data generated by the UCMR are used to evaluate and prioritize contaminants that may have adverse health effects in drinking water. EPA is implementing the second cycle of UCMR testing (with monitoring taking place from 2008 through 2010), called UCMR2.

EPA considered more than 200 contaminants for further testing and selected 25 that it considers most important. By 2013, EPA will make determinations for at least 5 contaminants on this list as to whether regulation with a national primary drinking water regulation is needed. Additional information on UCMR is available at:  
<http://water.epa.gov/lawsregs/rulesregs/sdwa/ucmr/ucmr2/index.cfm>

**NDMA and other Nitrosamines:** nitrosamines are chemical compounds that can be present in water. NDMA is among the more studied of the six nitrosamines being monitored as a part of UCMR2. EPA is currently evaluating the health effects of nitrosamines. Nitrosamines can exist in sources of drinking water or can form when disinfectants are added to water to kill microbes.

## **VII. Other Initiatives**

### **VII. A. Staffing**

TCEQ employs multiple contracts through State universities, agencies, and outside contractors to perform projects from sampling to technical assistance. TCEQ reported that money is often not the staffing issue. The Texas FTE Cap is often the actual problem. To compensate for the continuing TCEQ FTE cap, TCEQ outsources PWSS program activities through Texas State University (TSU) interns and an inter-local agreement with the Texas Engineering Extension System (TEEX), a member of the Texas A&M University System.

TCEQ has a FY 2007 to FY 2011 University of Texas at Arlington (UTA) contract to work with Houston area NTNCWSs and TNCWSs. The compliance work includes preparing Notice of Violation enforcement actions. TCEQ additionally uses five UTA staff for sample collection and lab analysis.

As defined in Section VI. Capacity Development - TCEQ applies a DWSRF 2% small system technical assistance contract with UTBEG to perform technical-assistance / FMT-capacity-assessments and uses a FMT Texas Rural Water Association (TRWA) contract that provides small system technical assistance site visits. TCEQ additionally has a sample collection contract for drinking water sampling.

### **VII. B. Texas Optimization Program (TOP)**

The TOP FY 2010 work plan deliverables are shown in Appendix K. The TOP is designed to improve the performance of existing surface water treatment plants without major capital improvements. To produce the safest water possible, water systems evaluate performance and identify the factors that might be limiting plant performance. The evaluation technique used most often by public water systems is the Comprehensive Performance Evaluation (CPE). The evaluation includes an assessment of:

- Plant design
- Operational procedures
- Maintenance practices
- Administrative policies

The TOP develops and provides instruction on surface water treatment and disinfection in the form of training modules. Quarterly new rule and drinking water concept training are

provided by the TOP to FOD and WSD. The TOP also trains FOD and WSD staff on Special Performance Evaluations.

In FY 2010 the Texas DBP PBT project (that began in October, 2009) was an emphasis. Directed Assistance module (DAM) courses are being taught by TRWA under a TCEQ contract.

**TOP Recognition:** TCEQ recognizes surface water treatment plant TOP efforts to optimize the performance since January, 1998. Each time a plant meets the recognition criteria continuously for six consecutive months, TCEQ presents the water system with a TOP Recognition Award.

## **VII. C. Water Efficiency**

Water-Sense is a voluntary public-private partnership that identifies and promotes high-performance products and programs that help preserve the nation's water supply. The Water-Sense program seeks to generate support for 1) consumer use of water-efficient products such as water-saving faucets 2) certification activities for water industry professionals, and 3) innovation in water-efficient product manufacturing. A broad spectrum of water-efficient products will carry the Water-Sense label, from lawn irrigation products to bathroom faucets. TCEQ committed to limited Water Sense involvement.

The Texas Water-Sense equivalent supporting water efficient products is “Water IQ: Know Your Water”. The Water IQ: Know your water is a statewide public awareness water conservation program that educates Texans about water conservation. Through Water IQ, the Texas Water Development Board (TWDB) provides information on water-efficient practices, raises awareness about the importance of water conservation, and helps Texans use less water.

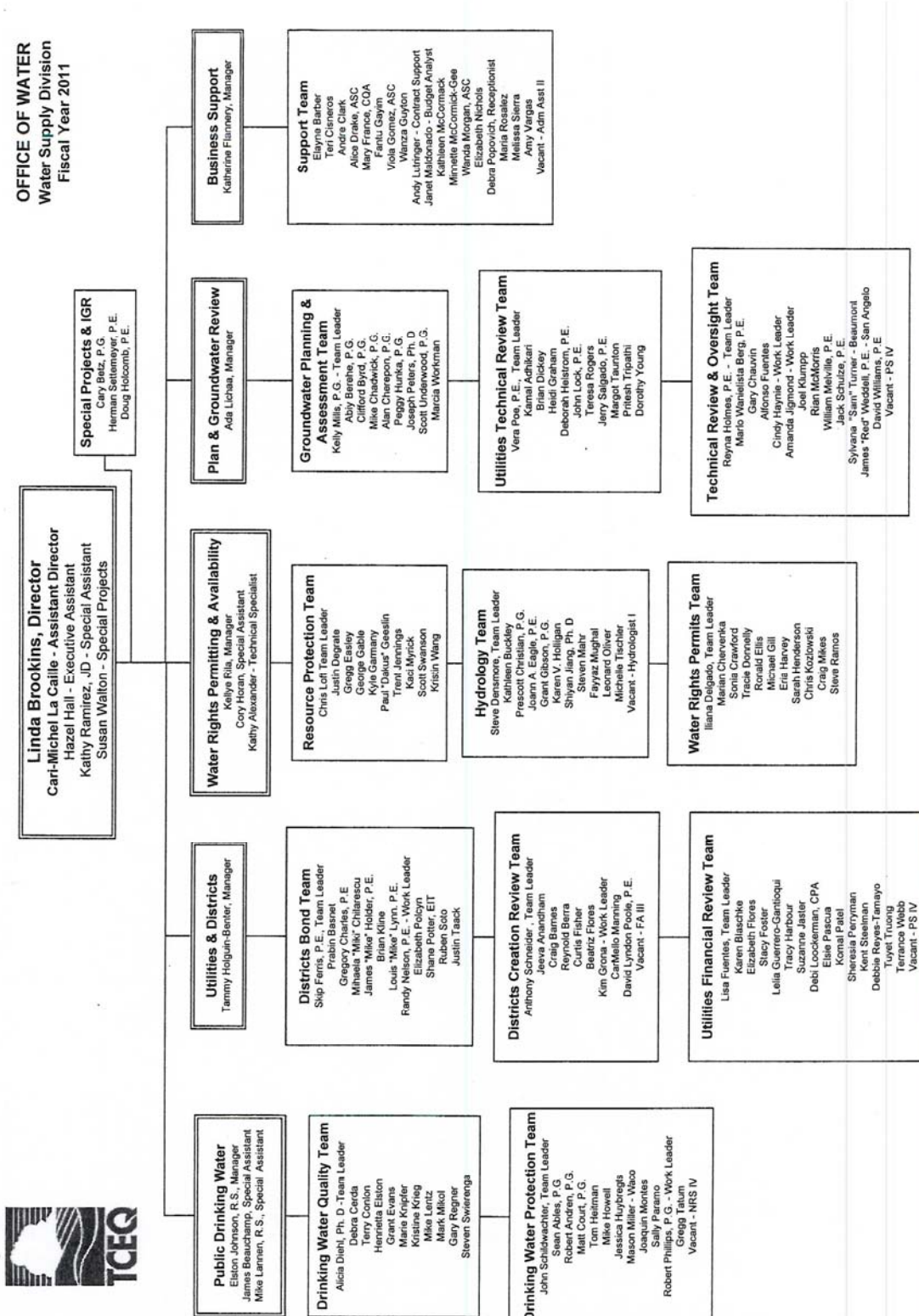
## **VII. D. Public Drinking Water Recognition Program**

The Texas Public Drinking Water Recognition Program recognizes the effort, dedication, and contribution public water supplies make to the state and to protecting public health. Each year at the annual TCEQ Public Drinking Water (PDW) Conference, water systems in Texas are recognized for their outstanding performance for the preceding calendar year for these categories:

- Small Water Systems Security Program
- Substantial Source Water Protection Program Implementation
- Innovative or Proactive System
- Outstanding Public Drinking Water System
- Outstanding Cross-Connection Control Program
- Total Coliform Rule Program

# APPENDIX A

## TCEQ Water Supply Division (WSD) Organization Chart



September 1, 2010

## APPENDIX B

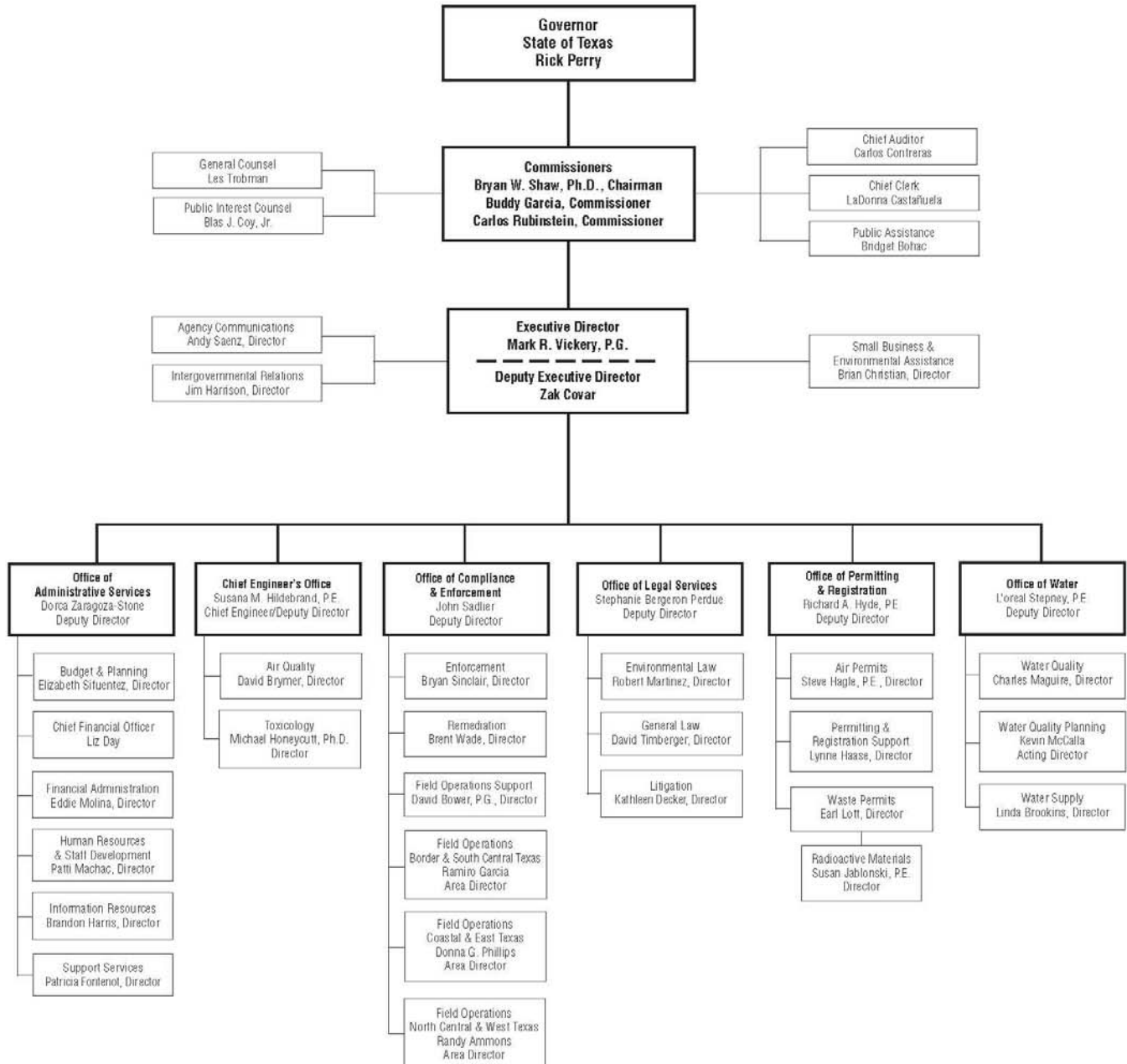
### TCEQ Water Supply Division Contact Table

<b>Water Supply Division</b> MAIN LINE: [512]-239-4691 FAX (Reception Area): 239-2214 Consumer Assistance Hotline: 239-6100  <b>Mailing Address:</b> Contact Name, Mail Code, TCEQ, P.O. Box 13087, Austin, TX 78711-3087				
<b>[512-]</b>				
<b>Director</b>	Linda Brookins	MC 154	239-4625	
Assistant Director	Cari-Michel La Caille	MC 154	239-6479	
Executive Assistant	Hazel Hall	MC 154	239-4310	FAX: 239-6145
Special Assistant	Kathy Ramirez	MC 154	239-6757	
Special Projects	Susan Walton	MC 154	239-6147	
Legislative and Consumer Liaison	Doug Holcomb	MC 154	239-6947	
Interstate Compacts	Herman Settemeyer	MC 154	239-4707	
Groundwater Program Specialist	Cary Betz	MC 154	239-4506	
<b>Public Drinking Water Section</b>		MC 155	239-4691	
Manager	Elston Johnson	MC 155	239-6266	FAX: 239-0030
Drinking Water Quality	Alicia Diehl	MC 155	239-1626	
Drinking Water Protection	John Schildwachter	MC 155	239-2355	
<b>Plan and Groundwater Review Section</b>				
Manager	Ada Lichaa	MC 159	239-6728	
Groundwater Planning and Assessment	Kelly Mills	MC 159	239-4512	FAX: 239-4450
Utilities Technical Review	Vera Poe	MC 159	239-6988	
Technical Review and Oversight	Reyna Holmes	MC 159	239-6183	
<b>Business Support Section</b>		MC 157	239-4691	
Manager	Katherine Flannery	MC 157	239-6116	FAX: 239-2214
Budget Analyst	Janet Maldonado	MC 157	239-4047	
Contract Support	Andy Lutringer	MC 157	239-6179	
Administrative Assistant	Alice Drake	MC 157	239-6023	
Administrative Assistant	Viola Gomez	MC 157	239-6173	
Administrative Assistant	Wanda Morgan	MC 157	239-6965	
<b>Utilities and Districts Section</b>		MC 153	239-4691	
Manager	Tammy Holguin-Benter	MC 154	239-6136	FAX: 239-6972
Utilities Financial Review	Lisa Fuentes	MC 153	239-6117	
Districts Bond	Skip Ferris	MC 152	239-6355	
Districts Creation Review	Tony Schneider	MC 152	239-4708	FAX: 239-6190
<b>Water Rights Permitting and Availability Section</b>		MC 160	239-4691	
Manager	Kellye Rila	MC 160	239-4612	FAX: 239-2214
Resource Protection	Chris Loft	MC 160	239-4715	
Surface Water Availability and Hydrology	Steve Densmore	MC 160	239-4691	
Water Rights Permits	Iliana Delgado	MC 160	239-3678	
Manager	Kellye Rila	MC 160	239-4612	FAX: 239-2214
Resource Protection	Chris Loft	MC 160	239-4715	

## APPENDIX C

### TCEQ ORGANIZATION

October 26, 2010





## APPENDIX D

### Primacy Requirements (40 CFR 142, Subpart B)

- The State must have regulations for contaminants regulated by the national primary drinking water regulations (NPDWRs) that are no less stringent than the regulations promulgated by EPA. States have up to 2 years to develop regulations after new regulations are released by EPA.
- The State must have adopted and be implementing procedures for the enforcement of State regulations.
- The State must maintain an inventory of public water systems in the State.
- The State must have a program to conduct sanitary surveys of the systems in the State.
- The State must have a program to certify laboratories that will analyze water samples required by the regulations.
- The State must have a laboratory that will serve as the State's "principal" lab, that is certified by EPA.
- The State must have a program to ensure that new, or modified, systems will be capable of complying with State primary drinking water regulations.
- The State must have adequate enforcement authority to compel water systems to comply with NPDWRs, including:
  - the authority to sue in court;
  - right to enter and inspect water system facilities;
  - authority to require systems to keep records and release them to the State;
  - authority to require systems to notify the public of any system violation of the State requirements; and
  - authority to assess civil or criminal penalties for violations of the State Primary Drinking Water Regulations and Public Notification requirements.
- The State must have adequate recordkeeping and reporting requirements.
- The State must have adequate variance and exemption requirements as stringent as EPA's, if the State chooses to allow variances or exemptions.
- The State must have an adequate plan to provide for safe drinking water in emergencies like a natural disaster.
- The State must have adopted authority to assess administrative penalties for violations of their approved primacy program
- The state must review plans and specification for new or modified water system facilities

### Applicable Law, Regulations and Guidance

- Safe Drinking Water Act, 1974, as amended in 1986 and 1996
- Primacy Regulations 40CFR142, Subpart B, 1976, as amended in 1986
- State Programs Priority Guidance (1992)
- Revisions to Primacy Requirements (1998), 63 FR 23362 to be codified at 40CFR142

## APPENDIX E

**TCEQ Primacy Table**

SDWA Rule (Deadline does not include two-year extension)	DRAFT PRIMACY REVISION APPLICATION OR PROGRAM UPDATE		STATE ADOPTION		FINAL PRIMACY REVISION APPLICATION OR PROGRAM UPDATE	
	<i>Status</i>	<i>Date</i>	<i>Status</i>	<i>Date</i>	<i>Status</i>	<i>Date</i>
New PWS Def. (Deadline: 4/28/02)	Received	1-Apr-00	Adopted	1-Feb-99	Approved	1-Aug-01
Administrative Penalty Authority (Deadline: 4/28/02)	Received	1-Apr-00	Adopted	1-Sep-97	Approved	1-Aug-01
CCR Rule (Deadline: 8/19/02)	Received	1-Aug-00	Adopted	1-Aug-00	Approved	1-Aug-01
IESWTR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	1-Aug-01
DBPR (Deadline: 12/16/02)	Received	1-Mar-00	Adopted	1-Sep-00	Approved	18-Aug-01
PN Rule (Deadline: 5/6/04)	Received	1-Oct-03	Adopted	21-Jan-04	Projected	14-Sep-11
LCR MR (Deadline: 1/14/04)	Received	1-Oct-03	Adopted	21-Jan-04	Approved	28-Dec-06
Radionuclides Rule (Deadline: 12/7/04)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Arsenic Rule (Deadline: 1/21/05)	Received	5-Aug-04	Adopted	1-Dec-04	Approved	12-Sep-05
Filter Backwash Rule (Deadline: 6/8/05)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
LT1 Rule (Deadline: 1/14/06)	Received	4-May-04	Adopted	21-Jan-04	Approved	28-Dec-06
Variances and Exemptions Rule (No Deadline)	Received	11-Oct-05	Adopted	2-Apr-02	Projected	14-Sep-11
Op Cert Program (Deadline: 9/30/02)	NA	NA	NA	NA	Approved	1-Jan-01
Op Cert Expense Reimbursement Grant	NA	NA	NA	NA	Approved	25-Sep-02
Stage 2 DBPR (Deadline: 1/4/2010)	Projected	14-Jun-11	Adopted	8-Jan-10	Projected	14-Sep-11
LT 2 IESWTR Rule (Deadline: 1/4/2010)	Projected	14-Jun-11	Adopted	8-Jan-10	Projected	14-Sep-11
GWR (Deadline: 10/11/08)	Projected	1-Dec-11	Adopted	8-Jan-10	Projected	1-Apr-12
LCR/STR (Deadline: 9/10/2011)	Projected	14-Jun-11	Projected	30-Apr-10	Projected	14-Sep-11

## APPENDIX F

**FY 2010 Performance Activity Measures (PAM) Table**

Code	Measure	EPA Goals				FY 2010 EPA R6 Results	Texas (TCEQ) Result	Status
			FY	TARGET				
211	Percent of the population served by community water systems that receive drinking water that meets all applicable health-based drinking water standards through approaches including effective treatment and source water protection.					90.3%	93.1%	Measure Met
			07	86.0%				
			08	88.0%				
			09	89.0%				
			10	88.0%				
SP-1	Percentage of the community water systems that provide drinking water that meets all applicable health-based drinking water standards through effective treatment and source water					88.8%	91.5%	On Target
			07	NA				
			08	87.0%				
			09	87.0%				
			10	85.0%				
SP-2	Percentage of "person months" during which community water systems provide drinking water that meets all applicable health-based drinking water standards					96.6%	98.1%	On Target
			07	NA				
			08	93.5%				
			09	95.0%				
			10	94.0%				

## APPENDIX G

(July 1, 2009 through June 30, 2010 as of October SDWIS-fed data pull)

**FY 2010 Source Water Protection Performance Measure Table**

Strategic Targets	Measure	EPA R6 Target	EPA R6 Results	TCEQ Results
SP 4(a)	Percent of the population served by community water systems where risk to public health is minimized through source water	36%	38%	32% (= 1523 / 4731)
SP 4(b)	Percent of the population served by community water systems where risk to public health is minimized by source water protection	60%	63%	59% (= 14,743,126 / 25,092,366)

**FY 2010 Sanitary Survey Performance Measure Table End-of-Year Results:**

Code	Measure	EPA Target	EPA R6 Result	Texas CWS Sanitary Surveys	Texas Number Subpart H CWSs	TCEQ Result	*Comment
SDW-1a	Percent of CWSs that have undergone a sanitary survey within three years of their last sanitary survey as required under the Interim Enhanced and Long-Term 1 Surface water Treatment Rules.	93%	78%	656	1107	59% (= 656 / 1107)	The Texas SDW-1a is currently filed in SDWIS-fed as 89%

\*The FY 2010 Texas SDW-1a is currently queried by EPA as 89% (1005 completed / 1123 total). However, the EPA FY 2010 measure was reported as 59%. The Texas SDW-1a was underreported due to a SDWIS-Texas reporting issue. This specific data base problem has been remedied as confirmed by EPA in the current SDWIS-TX and SDWIS-Fed databases via SDW -1a 3/22/2011 query.

<b>Appendix H</b> <b>Texas</b> <b>Top 50 Systems in Violation by Population</b> <b>07/01/2009 through 06/31/2010</b>			IOC			SOC	Rads		LT1	St1_DBP		TCR
			Arsenic	Fluoride	Nitrate	Di(2-ethylhexyl) phthalate	Gross Alpha, Excl. Radon & U	Comb Radium (-226 & -228)	IESWTR	HAA5	TTHM	TCR
POP	PWSID	PWSName	MCL			MCL	MCL		TT	MCL		MCL
299,602	TX1780003	City of Corpus Christi							1			
260,000	TX0430007	City of Plano										1
104,765	TX1650001	City of Midland Water Purification Plant		4								
99,462	TX2120004	City of Tyler										1
39,030	TX2200014	City of Haltom City										1
37,476	TX0140107	US Army South Fort Hood										2
30,300	TX1260002	City of Burleson										1
26,949	TX0910003	City of Denison										1
26,136	TX1390002	City of Paris										1
26,000	TX0310007	City of San Benito										1
25,233	TX1140001	City of Big Spring							7		1	
25,125	TX0950004	Plainview Municipal Water System										1
23,764	TX1020002	City of Marshall							1			
20,565	TX0150047	City of Converse										1
19,944	TX1110007	Acton MUD										1
19,884	TX0940022	Springs Hill WSC							1			1
18,585	TX0130001	City of Beeville							2			
17,891	TX1810004	City of Orange										1
16,572	TX1070190	West Cedar Creek MUD										1
16,317	TX2460043	Chisholm Trail SUD										1
15,939	TX0310005	Laguna Madre Water District							1			1
13,624	TX0460172	CLWSC Triple Peak Plant										1
13,269	TX0290002	City of Port Lavaca										1
13,250	TX0570016	City of Seagoville										1
12,500	TX2440001	City of Vernon			3							
12,210	TX1210001	City of Jasper										1
11,118	TX1070167	East Cedar Creek FWSD Brookshire								3		
9,652	TX0020001	City of Andrews	4	4								
9,297	TX0030023	Hudson WSC									3	
8,379	TX1011250	Harris County MUD 150	4									
8,120	TX1500012	Kingsland WSC								1	3	
7,810	TX0820002	City of Pearsall										1
7,149	TX0310003	City of La Feria									3	
6,963	TX0370018	North Cherokee WSC									3	
6,624	TX1660001	City of Cameron										2
6,096	TX0270049	City of Granite Shoals									1	
6,090	TX1070019	East Cedar Creek FWSD B A Mckay								2		
6,078	TX0830012	City of Seminole	3									
5,868	TX2150001	City of Breckenridge							1			
5,826	TX1011227	Harris County MUD 105					2					
5,717	TX2370001	City of Hempstead	4									
5,602	TX1230003	Jefferson County WCID 10							1			
5,433	TX1630021	Yancey WSC				2						
5,324	TX1540001	City of Brady					2	2			3	
5,217	TX1010625	Tattor Road MUD										1
5,200	TX2260027	Goodfellow Air Force Base										1
5,100	TX1610004	City of Palacios										1
5,010	TX1240001	Jim Hogg County WCID 2	3									
4,983	TX1012858	West Harris County MUD 11	1									
4,926	TX1840027	City of Willow Park										1
1,481,800	#violations		19	8	3	2	4	2	15	6	17	28
	# systems		6	2	1	1	2	1	8	3	7	26
	Population served		39,819	114,417	12,500	5,433	11,150	5,324	414,477	25,328	68,182	784,820

# APPENDIX I

## FY 2010 Texas Systems in Violation

(October 1, 2009 through September 30, 2010 as of November 16, 2010)

(Small <= 3,300; Medium: 3,301 - 10,000; Large >10,000)

				Community			Non-Transient Non-Community			Transient Non-Community		
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large
M&R	Chem	IOC	Antimony, Total	1								
			Arsenic	1								
			Barium	1								
			Beryllium, Total	1								
			Cadmium	1								
			Chromium	1								
			Fluoride	3	1							
			Mercury	1								
			Nitrate	25	4	1	2			3		
			Selenium	1								
			Thallium, Total	2								
		VOC	1,1,1-Trichloroethane	3	4							
			1,1,2-Trichloroethane	3	4							
			1,1-Dichloroethylene	3	4							
			1,2,4-Trichlorobenzene	3	4							
			1,2-Dichloroethane	3	4							
			1,2-Dichloropropane	3	4							
			Benzene	3	4							
			Carbon tetrachloride	3	4							
			Chlorobenzene	3	4							
			cis-1,2-Dichloroethylene	3	4							
			DiChloromethane	3	4							
			Ethylbenzene	3	4							
			o-Dichlorobenzene	3	4							
			p-Dichlorobenzene	3	4							
			Styrene	3	4							
			Tetrachloroethylene	3	4							
			Toluene	3	4							
			trans-1,2-Dichloroethylene	3	4							
			Trichloroethylene	3	4							
			Vinyl chloride	3	4							
			Xylenes, Total	3	4							
	GWR	GWR	E. COLI	30	4	7	1			16		
	SWTR	IESWTR		1						1		
		LT2	E. COLI	8	3					2		
	LCR			1								
	PN	CCR		457	16	9	2			3		
		PN		725	87	42	173	1		442		
	TCR			329	25	14	127			291		
MCL	Chem	IOC	Arsenic	95	11		11					
			Fluoride	36	2	1						
			Nitrate	38		1	5			15		
		SOC	1,2-Dibromo-3-Chloropropane				1					
			Di(2-ethylhexyl) phthalate		1							
			Ethylene Dibromide		1							
	DBPR	Stage 1	HAA5	26	3	1	1					
			TTHM	73	11	1	5					
		IESWTR		5	5	6						
	LCR			20			4			1		
	Rads	Rads	Combined Radium (-226 & -228)	30	2							
			Combined Uranium	8	1							
			Gross Alpha, Excl. Radon & U	27	3							
	TCR			44	11	20	8	1		11		

# APPENDIX J

## FY 2010 Texas Violations

(October 1, 2009 through September 30, 2010 as of November 16, 2010)

(Small <= 3,300; Medium: 3,301 - 10,000; Large >10,000)

				Community			Non-Transient Non-Community			Transient Non-Community			
Vtype	Rule	SubGroup	Contaminant	Small	Medium	Large	Small	Medium	Large	Small	Medium	Large	
M&R	Chem	IOC	Antimony, Total	1									
			Arsenic	1									
			Barium	1									
			Beryllium, Total	1									
			Cadmium	1									
			Chromium	1									
			Fluoride	3	1								
			Mercury	1									
			Nitrate	25	4	1	2			3			
			Selenium	1									
		Thallium, Total	3										
		VOC	1,1,1-Trichloroethane	3	4								
			1,1,2-Trichloroethane	3	4								
			1,1-Dichloroethylene	3	4								
			1,2,4-Trichlorobenzene	3	4								
			1,2-Dichloroethane	3	4								
			1,2-Dichloropropane	3	4								
			Benzene	3	4								
			Carbon tetrachloride	3	4								
			Chlorobenzene	3	4								
			cis-1,2-Dichloroethylene	3	4								
			DiChloromethane	3	4								
			Ethylbenzene	3	4								
			o-Dichlorobenzene	3	4								
			p-Dichlorobenzene	3	4								
			Styrene	3	4								
			Tetrachloroethylene	3	4								
			Toluene	3	4								
			trans-1,2-Dichloroethylene	3	4								
			Trichloroethylene	3	4								
			Vinyl chloride	3	4								
		Xylenes, Total	3	4									
	GWR		E. COLI	30	4	7	1				16		
SWTR	IESWTR		6							5			
	LT2	E. COLI	14	3						5			
LCR			1										
PN	CCR		816	18	9	3				5			
	PN		2,083	143	57	359	1			1,482			
TCR			765	27	16	253				696			
MCL	Chem	IOC	Arsenic	287	35		33						
			Fluoride	106	8	4							
			Nitrate	87		3	11			30			
		SOC	1,2-Dibromo-3-Chloropropane				1						
			Di(2-ethylhexyl) phthalate		2								
			Ethylene Dibromide		1								
	DBPR	Stage 1	HAA5	48	4	3	2						
			TTHM	173	26	1	11						
	SWTR	IESWTR		16	6	13							
	LCR			22			4				1		
	Rads	Rads	Combined Radium (-226 & -228)	48	3								
			Combined Uranium	14	1								
			Gross Alpha, Excl. Radon & U	42	5								
	TCR			45	13	21	9	1			11		

# TOP Workplan Deliverables for FY10 **(Final Report, 08/31/10)**

Activity	Planned	Final Projection	Completed to Date
SPEs & Data Audits (including Training) <sup>(1)</sup>	6	6	7
mCPEs/oCPEs <sup>(2)</sup>	2	4	4
On-site Data Validation/Audits	0	1	1
Staff Training Module Updates <sup>(3)</sup>	2	0	0
DBP PBT Site Visits <sup>(4)</sup>	7	8	8
DBP PBT Workshops <sup>(5)</sup>	4	4	4
DBP PBT Weekly Follow-up	315	315	On schedule
DAM Train-the-Trainer <sup>(6)</sup>	1	0	0
DAM on-site QA/QC	0	0	0
Out-of-state AWOP meetings <sup>(7)</sup>	3	2	1
In-state AWOP meeting <sup>(7)</sup>	1	1	1
Quarterly Core Team meetings	4	4	4
TOP Recognition Program Awards	several	Fewer	4
TOP Articles/AWOP Reports	3	3	2
FOD Staff Conference**	1	1	1
VTCs <sup>(8)</sup>	2	2	1
Coagulation & Mixing Module contract	0	0	0
Professional Development	5	5	5
Revised SPE Manual <sup>(9)</sup>	1	1	0
Other Operator Training/Outreach <sup>(10)</sup>	5	10	11
SDWIS conversion*	NA		
UV, membrane, and SW MOR updates*	NA		
Electronic Data Reporting project*	NA		

\* Commitment to WSD

\*\* Commitment to FOD

- (1) San Augustine (no training, Mgmt requested, expanded);  
Pt Comfort (Melanie Edwards 2<sup>nd</sup>, again, avoided mCPE);  
Pt Lavaca (Melanie Edwards 2<sup>nd</sup> and Hector Gonzales 2<sup>nd</sup>);  
Big Springs (Malcolm, Regional request);  
Thunderbird Bay (no training; Mgmt requested, expanded)
  - (2) mCPE – Emory, Robert Lee, West Cedar Creek
  - (3) Clarification and Disinfection module updates delayed again
  - (4) Teresa replaced Dave as facilitator so there was an extra site visit
  - (5) 1st in Austin, 2<sup>nd</sup> in Corsicana, 3<sup>rd</sup> in Abilene, 4<sup>th</sup> in Midlothian
  - (6) DAM 3 TtT delayed due to an extra CPE and an extra SPE (conducted at Mgmt request)
  - (7) Louisiana (April), June OOS replaced by VTC; the in-state meeting was held in Dallas
  - (8) Disinfection & TBD; replaced by participation in quarterly WSD-sponsored VTCs and the last one was cancelled by WSD
  - (9) SPE Manual – peer review
  - (10) Chloramine Workshop - Ft Bend (Teresa & Jack); Dallas Section Annual Seminar, Instructors Seminar, PDW Conference, (Jack); 3 TWUA Chapter Meetings, Abilene Regional School (Don); SW Operator JTA – 3+ (Cindy)
- Brownwood (Linda White's 3<sup>rd</sup>);  
Archer City (Gary Chauvin 2<sup>nd</sup>);  
River Oaks (Rian McMorris 1<sup>st</sup>, Gary 3<sup>rd</sup>)
- oCPE – Port Arthur (EPA-initiated project)